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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/792,056	03/03/2004	Michael J. Otto	154-28553-US	4804

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EXAMINER	
MCAVOY, ELLEN M	

ART UNIT	PAPER NUMBER
1764	

MAIL DATE	DELIVERY MODE
06/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/792,056	OTTO ET AL.	
	Examiner	Art Unit	
	Ellen M. McAvoy	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-63 and 65-126* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-63 and 65-126* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 13-24, 33-35, 37-41, 47-52, 58-60, 63-67, 69-74, 79-81, 83-88, 97-103 and 111-113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukutani (6,448,207).

Applicants' arguments filed 13 March 2007 have been fully considered but they are not persuasive. As previously set forth, Fukutani et al ["Fukutani"] discloses an aqueous metal working fluid containing water and, as additives, a metal stearate including lithium stearate, a carbonate, a hydrogencarbonate, and a surfactant. See column 2, lines 18-46. The metal working fluid may further contain ethylene glycol and a rust inhibitor. The examiner maintains the position that Fukutani meets the limitations of independent claims 1, 33, 47, 58, 63, 79, 97 and 111 which "consists essentially of" at least one alkali metal fatty acid soap dispersed in a carrier fluid. The examiner maintains the position that the term "carrier fluid" is broad enough to include both water and ethylene glycol. Although the prior art does not teach drilling fluids, the preamble language "lubricants for drilling fluid systems" is a statement of intended use which carries no weight in the composition claims. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness

but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicants argue that:

> "Regardless of whether the phrase "drilling fluid system" in claims 1, 33, 47 or 58 is given weight or not, the examiner has not pointed to a teaching or suggestion in Fukutani of a lubricant 'consisting essentially of' the components of claims 1, 33, 47, or 58. The examiner has not established that a person of ordinary skill in the art would be motivated to modify Fukutani in the manner required to produce the claimed combination. '[A] rejection cannot be predicated on the mere identification [in a single cited reference] of individual components of claimed limitations. Rather, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.' *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317-1318 (Fed. Cir. 2000)."

This is not deemed to be persuasive because the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). As set forth above, Fukutani teaches a metal working fluid consisting of a lithium stearate and other additives including a carbonate, a hydrogencarbonate and a surfactant in amounts totaling 0.2 wt.%. The metal working fluid of the prior art is especially useful for cutting tools including single point tools such as bites, and multiple point tools such as drills. See column 3, lines 19-29. The examiner is of the position that since the use of applicants' claimed fluid as a drilling fluid does not differ from the use of the fluid in Fukutani, the basic and novel characteristics of the claimed invention are not affected by the additional additives. Further, the examiner is of the position that there is no evidence of

record that the presence of the additional additives of Fukutani in the minor amount of 0.2 wt.% would materially affect the basic and novel characteristic of the claimed invention.

Claim Rejections - 35 USC § 103

Claims 1-15, 19-32 and 121 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Mondshine et al (3,761,410).

Applicants' arguments filed 13 March 2007 have been fully considered but they are not persuasive. As previously set forth, Mondshine et al ["Mondshine"] disclose water based drilling fluids having enhanced lubricating properties by the addition thereto of a lubricating additive, such as animal fats, vegetable oils and fatty acids, and mixtures thereof; and a water-insoluble alcohol component having 4-15 carbon atoms. Suitable vegetable oils include castor oil, soybean oils, cottonseed oils, sunflower oils and corn oils. See column 5, lines 1-10. Suitable alcohols include any water insoluble alcohol having 4-15 carbon atoms butanol, hexanol, and dodecanol. See column 5, lines 49-54. A pour point depressant may also be added to the water based drilling fluids including ethylene glycol, propylene glycol, and mixtures therof. Mondshine teaches that the water component of the water based drilling fluids include fresh water, salt water, and sea water. See column 6, lines 50-64. The examiner maintains the position that Mondshine meets the limitations of the drilling fluid of the claims since the combination of salt water/sea water and vegetable oil will result in sodium salts of the vegetable oils.

Applicants argue that:

> "The examiner has not pointed to a teaching or suggestion in Mondshine of a lubricant 'consisting essentially of' a 'dispersion in a carrier fluid' of 'at least one fatty acid soap comprising at least one alkali metal having a valence of 1.'"

This is not deemed to be persiasive because the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. Although the term"dispersion" is not set forth, the combination of a water based drilling fluid and a vegetable oil and an alcohol will form a mixture or a dispersion of the oil component in the water component.

Claim Rejections - 35 USC § 103

Claims 1-126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (5,658,860) alone or incombination with Chesser et al (6,403,537).

Applicants' arguments filed 13 March 2007 have been fully considered but they are not persuasive. As previously set forth, Clark et al ["Clark"] disclose a well fluid emulsion having a water phase and an oil phase of a sulfurized alcohol and a naturally occuring fat, oil or derivatives thereof. Also disclosed is a method of lubricating drilling equipment used in conjunction with the drilling. Suitable naturally occuring fats and oils may be obtained from vegetable oils such as castor oil, coconut oil, corn oil, cottonseed oil, olive oil and sunflower oil. The preferred class of alcohols are glycols and polyglycols having a molecular weight in the range of about 200 to about 2000. See column 3, line 39 to column 4, line 21. Suitable fatty acids include include those having a carbon chain length of 8-30 carbon atoms. Clark teaches

that derivatives of the fatty acids may be used including alkali metal derivatives. See column 5, lines 37-58. The examiner maintains the position that the drilling fluid of Clark clearly meets the limitations of most of the above rejected claims. Applicants' invention differs in some depending claims by adding one or more monomers comprising acrylamide. However, Chesser et al ["Chesser"] is added to teach that drilling fluid systems conventionally contain acrylamide monomers. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have added the acrylamide monomers of Chesser to the drilling fluids of Clark if the known imparted properties were so desired. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, here as drilling fluids, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Applicants argue that:

> "The examiner has not pointed to a teaching or suggestion in Clark of a lubricant 'consisting essentially of' a 'dispersion in a carrier fluid' of 'at least one fatty acid soap comprising at least one alkali metal having a valence of 1.'"

This is not deemed to be persiasive because, as set forth above, the transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. There is no evidence of record that the other additives of Clark will materially affect the basic and novel characteristics of the claimed drilling fluid. Although the term"dispersion" is not set

forth, the combination of a water based drilling fluid and a vegetable oil and an alcohol will form a mixture or a dispersion of the oil component in the water component

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ellen M McAvoy
Primary Examiner
Art Unit 1764

EMcAvoy
May 24, 2007